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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/379,239 08/23/99 SCHOLTEN

J CSI1260-1

EXAMINER

QM02/0131

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WAYNER, W

ART UNIT

PAPER NUMBER

3744

DATE MAILED:

01/31/01

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.

09/379,237

Applicant(s)

SCHOLTEN ET AL

Examiner

W. WAYNER

Group Art Unit

3744

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

## Period for Response

A SHORTENED STATUTORY PERIOD FOR RESPONSE IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a response be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for response specified above is less than thirty (30) days, a response within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for response is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to respond within the set or extended period for response will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

## Status

- ☒ Responsive to communication(s) filed on 8/23/99
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- ☒ Claim(s) 1, 3-5, 8, 15, 17-19, 22, 29, 31, 32, 33, 36, 43-48, 79-87 is/are pending in the application.
- Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- ☒ Claim(s) 15, 17, 18, 19, 22 is/are allowed.
- ☒ Claim(s) 1, 4, 5, 8, 29, 32, 33, 36, 43, 45, 46, 48, 79, 80, 82, 83, 85-87 is/are rejected.
- ☒ Claim(s) 3, 31, 44, 47, 81, 87 is/are objected to.
- ☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been received.
- ☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.
- ☐ received in this national stage application from the International Bureau (PCT Rule 1.7.2(a)).

\*Certified copies not received: \_\_\_\_\_

## Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_
- ☒ Notice of References Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☒ Other REISSUE GUIDE
- THE DRAWING HAVE BEEN APPROVED

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6,11 Claims 1, 4, 5, 29, 32, 33, 43, 45, 46, 48, 79, 83, and 86 rejected under 35 U.S.C. 103(a) as being unpatentable over Nurczyk taken in combination with Heckenback, Matsunaga and Arima et al. Nurczyk shows a VAV terminal 36 supplying air to a room 10a in which a room temperature sensor 60 along with a temperature set point device in 60 generate an air flow set point (i.e. a commanded valve position)(see col. 3, lines 13-15), an air flow sensor 62 output which is compared with the commanded valve position and a controlled air volume damper 50. At the top of col. 3, it is stated that control means 54 relies on a microcomputer based control using a stored algorithm, but the specific mode of control is not named. Hechenback shows a VAV unit that uses a differential pressure sensor 29 i.e. plural pressure sensors in conjunction with control of air damper 17. Since Nurczyk states in col. 3, line 20, that any device for sensing air flow can be used, it would be obvious from Heckenback to use a plural pressure sensor. The references to Arima et al and Matsunaga show that it is conventional in automatic control to provide a specific mode control using fuzzy logic to arrive at a final control output. In order to implement the operation of Nurczyk, it would have been obvious to utilize fuzzy logic of Arima et al and/or Matsunaga.

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o, X- Claims 8 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claim 1 and further in view of Tate et al. Tate et al shows remote control of a VAV terminal. These claims do not recite a lon network. In order to provide versatility it would have been obvious to provide Nurczyk with the remote control of Tate et al.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

o, X Claims 80, 85, and 87 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The original disclosure does not support fuzzy logic control of a liquid valve, claims 80 and 87 or the shield of claim 85.

Claim 80 requires that a water valve actuator is controlled in response to a flow process valve and a demand signal using fuzzy logic. In turn, the flow process valve is determined by a plurality of flow sensing inputs. The subject matter in the specification at page 13, line 20 and in page 20, lines 2-17 does not support this claim and is clearly not inherent in normal operation.

Claim 85 recites "a shield surrounding said flow sensing temperature". The specification in page 47, lines 22-27 states that heat sink may be expanded around the

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flow sensor 536. A shield is not necessarily a heat sink and the specification does not equate 'shield' with a heat sink.

o.k. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

o.k. Claim 1 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 49 of copending Application No. 08/932,652 in view of Official Notice. Official Notice is taken that it is well known to provide a damper position sensor that shuts down the damper when it reaches certain positions such a fully open or minimum ventilation opening. In order to provide the above two functions it would have been obvious to so modify claim 1.

This is a provisional obviousness-type double patenting rejection.

o.k. This application is objected to under 37 CFR 1.172(a) as lacking the written consent of all assignees owning an undivided interest in the patent. The consent of the assignee must be in compliance with 37 CFR 1.172. See MPEP § 1410.01.

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O.K. A proper assent of the assignee in compliance with 37 CFR 1.172 and 3.73 is required in reply to this Office action.

The application only contains the consent of the assignee from the previous application 08/932,652 filed September 18, 1997. This must be up-dated. See the enclosed re-issue guideline 9.

O.K. Claim 15 is not identical to patent claim 15 and therefore the newly added matter i.e. "Operating said variable air volume terminal in a warm up mode of operation" must be underlined, 37 CFR 1.173(b)(2).

O.K. Claims added to a patent by re-issue must follow the number of the highest numbered patent claim. Since the highest numbered patent claim in re-issue 08/932,652 is 63, thence new claims numbered at 79-87 should be re-numbered as 64-72 before allowance.

O.K. Although the new rules only require that one error be pointed out in a re-issue declaration, the Examiner considers it advisable for applicant to present a declaration that specifically points out the amendment to claim 15 and the fact that new claims 79-86 have been added.

O.K. Claims 3, 31, 44, 47, and 81 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication should be directed to W. Wayner at telephone number 703-308-1041.

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*J. Wallberg for*  
W. Wayner  
Primary Examiner  
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If it is determined that litigation is ongoing, action should be suspended using form paragraph 14.11 unless any one of the following applies: (A) a stay of litigation is in effect; (B) the litigation has been terminated; (C) there are no significant overlapping issues between the application and the litigation; or (D) it is applicant's desire that the application be examined at that time.

8. If the patent (or the reissue application) has been assigned, 37 CFR § 1.172 requires that all assignees owning an undivided interest consent to the filing of the reissue application. If there is no assignee, the application should so state. Otherwise, it can be assumed the patent and/or application is assigned. MPEP 1410.01 discusses the acceptance of the reissue application for examination upon the filing of a petition requesting waiver of the requirements of § 1.172; however, the application cannot be allowed without consent of all assignees.
9. Assignees must establish their ownership interest in the patent on which the reissue application is based by strictly complying with the provisions of 37 CFR § 3.73(b). MPEP 324. An assignee's ownership may be established by ("a" or "b") and "c" below:
  - a. submitting to the Office copies of the documentary evidence of a chain of title from the original owner to the assignee (e.g., copy of an executed assignment submitted for recording) as set forth in 37 CFR 3.73(b), or
  - b. specifying where such documentary evidence is recorded in the Office (e.g., by reel and frame number), and
  - c. submitting a statement establishing ownership that must be signed by a party authorized to act on behalf of the assignee. The statement may, however, be signed by any person if it contains an averment that the person is empowered or authorized to sign on behalf of the assignee.

The statement establishing ownership and the consent must be signed by a person having the authority to do so. See the sample form on page 300-13 of the MPEP.

If the assignee is an organization (e.g., corporation, partnership, university, government agency, etc.), then:

- A. the statement may be signed by a person in the organization having the apparent authority to sign on behalf of the organization (e.g., an officer of the organization, a chairman of the board of directors, etc.) or
- B. the statement may be signed by any person, if the statement includes an averment that the person signing is empowered to sign such statement on behalf of the assignee.

10. Certificate of Correction changes must be entered in the reissue application without bracketing or underlining. This will incorporate the changes as part of the original patent and not as